



Industrie Service

**Mehr Sicherheit.
Mehr Wert.**

Investigation report Hole Mat CZ

Client	OTTO Sport- und Reitplatz GmbH Am Umspannwerk 6 90518 Altdorf	DAP-PL-2884
Order number	1504654	
Date of Order	05 -25-2010	
Purpose of Contract:	Exploration of a material sample concerning the possible tax of groundwater polluting substances	Date: 07 - 01 - 2010 mark: IS-US-NBG/geu-pc/CZ
Date of exploration:	05-31 – 06-30-2010	Document consists of 3 pages. Page 1 of 3
Expert:	Dr. Geuder	The partial reproduction of the document and use for promotional purposes require the written approval of the TÜV SÜD Industrie Service GmbH.
Phone:	0911/6557-274	The test results relate only to the groups of test items .
Pages		
report	3	
appendix	-	





1. Purpose of investigation

In order from Fa. OTTO Sport- und Reitplatz GmbH (date of order 05 – 25- 2010) the eluate of a sample of a hole mat should be evaluated concerning the possible tax of groundwater polluting substances.

2. Test conditions

The material sample was tested with the following analytical procedures:

Parametre	Method
Eluation	DIN 38414-S4
pH	DIN 38404-C5
Electrical conductivity	DIN EN 27888
Chloride	DIN EN ISO 10304-1
Sulfate	DIN EN ISO 10304-1
Sum of cyanides	DIN 38405-D13
Phenol index	DIN 38409-H16
DOC	DIN EN 1484
AOX	DIN EN ISO 9562
Arsene	DIN EN ISO 17294-2
Lead	DIN EN ISO 17294-2
Cadmium	DIN EN ISO 17294-2
Chrome	DIN EN ISO 17294-2
Copper	DIN EN ISO 17294-2
Nickel	DIN EN ISO 17294-2
Quicksilver	DIN EN ISO 1483
Thallium	DIN EN ISO 17294-2
Zinc	DIN EN ISO 17294-2
PCB	DIN 38407-F3

The investigation parameters were selected so that a possible contamination of the soil can be safely ruled. The relevant parameters of the investigation are according to the „Bundes-Bodenschutzverordnung“ and the „LAGA-Merkblattes Nr. 20 (edition 2004 respectively 1997).

3. Results

Following results are determined:

Parametre	Value Sample „CZ“	Z 0-value respectively. test value	unit
pH	7,80	6,5 – 9,5 ¹⁾	---
Electrical conductivity	32	250 ¹⁾	µS/cm
Chloride	0,1	30 ¹⁾	mg/l
Sulfate	0,3	20 ¹⁾	mg/l
Sum of cyanides	<0,01	0,050 ³⁾	mg/l
Phenol index	0,020	0,020 ¹⁾	mg/l
Arsene	<0,001	0,010 ³⁾	mg/l
Lead	<0,005	0,025 ³⁾	mg/l
Cadmium	<0,001	0,005 ³⁾	mg/l
Chrome	<0,005	0,050 ³⁾	mg/l
Copper	<0,001	0,050 ³⁾	mg/l
Nickel	<0,001	0,050 ³⁾	mg/l
Quicksilver	<0,0001	0,001 ³⁾	mg/l
Thallium	<0,001	0,001 ²⁾	mg/l
Zinc	<0,005	0,500 ³⁾	mg/l
PCB	<0,05	0,05 ³⁾	µg/l

¹⁾ Z 0-Value of „LAGA-Merkblattes 2004“

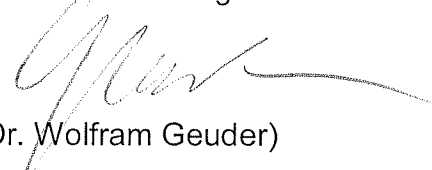
²⁾ Z 0-Value of „LAGA-Merkblattes 1997“

³⁾ Test data for the pathway soil-groundwater according to the „Bundesbodenschutz-Verordnung vom 12.07.1999“.

4. Evaluation of the results

The analysis results show that the tested floor mat is according to the relevant guidelines.

Umwelt Service
Branche Nürnberg



(Dr. Wolfram Geuder)